

ImageNow Interact for Lexmark

Installation and Setup Guide

Version: 3.5.x



perceptivesoftware

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Table of Contents

ImageNow Interact for Lexmark	5
Install Interact for Lexmark on Windows	5
About Interact for Lexmark installation	5
Install Interact for Lexmark.....	6
Open a firewall port	7
Verify that Message Agent is running.....	7
Establish a connection between Message Agent and the device	8
Print a network setup page	9
Configure ImageNow Server	9
Install the Interact for Lexmark license	9
Configure Interact for Lexmark	10
Overview.....	10
Profiles.....	11
Profile definitions.....	11
Send profile definitions to a device.....	11
Turn on One Touch Scanning mode	13
Document key settings in the profile definition.....	13
<i>Show or hide a field</i>	13
<i>Change the default value displayed for a field</i>	13
<i>Create an exclusive list of values for a field</i>	14
<i>Allow a user to change a value</i>	15
<i>Allow a user to change custom property values</i>	15
Set up device statistics or workflow routing.....	15
<i>Assign queue privileges</i>	15
<i>Documenting workflow settings</i>	16
Enable SSL.....	16
Test the application.....	17
Uninstall, upgrade, or reinstall Interact for Lexmark	17
Operate Interact for Lexmark with the Remote Operator Panel	18
Enable the Remote Operator Panel	18
Access the Remote Operator Panel.....	18
Troubleshoot Interact for Lexmark	19
The application icon does not appear on the Welcome screen	19

Scanned documents don't appear in ImageNow	19
Fix denied privileges and access	19
An application error has occurred.....	20
Application cannot connect to ImageNow server.....	20
Application cannot authenticate user.....	20
Application cannot associate scanned documents to workflow queues	21
Appendix A: Embedded Web Server	22
Export a configuration file	22
Import a configuration file	22
Appendix B: INI Configuration Tables	23
profile.ini settings	23
Index.....	33

ImageNow Interact for Lexmark

ImageNow Interact for Lexmark is a software application that lets a Lexmark Multifunction Printer (MFP) user convert paper documents to electronic images, index them, and store them in an ImageNow system—all with a few button clicks on the printer's control panel. Once captured, the document is immediately available for subsequent retrieval and optional workflow processing using ImageNow Client or WebNow.

There are several components to Interact for Lexmark:

- You run Interact for Lexmark by placing a document in the Automatic Document Feeder or on the scanner glass and then selecting an application from the home screen on the control panel. The device scans the document and then sends the document to ImageNow Server.
- ImageNow Server receives, processes, and stores the scanned document so that you can view the document using ImageNow Client.
- ImageNow Client or WebNow is where you view scanned documents. ImageNow Client Management Console is also where you assign workflow routing if you want Interact for Lexmark to add newly scanned documents to workflow queues automatically.
- ImageNow Message Agent handles the communication between your Lexmark device and ImageNow Server.
- The Embedded Web Server allows you to configure your Lexmark device from a remote computer and check the status of your device. You use the Embedded Web Server to upload initialization (INI) files and make other configurations.

This document explains how to install Interact for Lexmark and how to change settings for Interact for Lexmark by modifying the profile.ini files.

Interact for Lexmark is licensed per device.

Install Interact for Lexmark on Windows

This section provides instructions for installing Interact for Lexmark.

About Interact for Lexmark installation

Before you start this installation, make sure that you have installed and tested the following products. The documents referenced in this list are available in the Customer Portal on www.perceptivesoftware.com.

- Install and test ImageNow Server and at least one ImageNow Client. Refer to the appropriate ImageNow installation and setup guide for your platform and database.
- Install and test Message Agent. Refer to the *ImageNow Message Agent Installation and Setup Guide* for more information.
- Verify that your system meets the requirements for this product. For product technical specifications and system requirements, go to www.perceptivesoftware.com, click **Customer Portal**, and then log in. The Technical Specifications document for this product version is available on the Product Documentation tab.

The following steps outline the high-level procedures that you perform when installing Interact for Lexmark. Full instructions for each step appear in separate sections.

1. Download and install Interact for Lexmark.
2. If necessary, open a firewall port so that Message Agent can communicate with Interact for Lexmark.
3. Verify that Message Agent is running.
4. Establish a connection between Message Agent and the device.

After you complete these steps (see the following section for detailed instructions), continue to the “Configure Interact for Lexmark” sections of this document to learn how to create Interact for Lexmark application and profile definitions and configure device authentication.

Install Interact for Lexmark

Perform the following steps to download and install Interact for Lexmark.

1. Download Interact for Lexmark, using the following procedure:
 1. Go to the Perceptive Software website at www.perceptivesoftware.com and log in to the Customer Portal.
 2. In the **Product Downloads** page, search for all downloadable items for the version of Interact for Lexmark you want to use, which includes the product installer (FLS file) and product documentation.

The table below indicates the correct FLS file for your printer. For a list of supported printer models for v1.2, v2.0, v3.1, and v4.0, refer to the *ImageNow Technical Specifications* for your ImageNow release.

FLS File Name	Corresponding Printers
interact_e1_mfp.flc	eSF v1.x printers
interact_e2_mfp.flc	eSF v2.x printers
interact_e3-4_s2.flc	eSF v3.x and v4.x printers
interact_e4_s3.flc	eSF v4.x 4.3-inch screen printers (CX410, MX410 , MX510, and MX511)

3. Download the relevant files to a temporary directory on your computer.
2. Install Interact for Lexmark using the following procedure:
 1. Type the printer IP address into the address field of your Web browser and then press ENTER to access the Embedded Web Server for the device. The IP address of your printer may appear on the top left corner of your touch screen. The Embedded Web Server allows you to configure your device from a remote computer and check the status of the device.

Note If you do not know the IP address of the printer, print a network setup page and locate the IP address in the TCP/IP section. For information on printing a network setup page, refer to the “Print a network setup page” section of this document.

2. Do one of the following:
 - Click **Settings > Device Solutions > Embedded Solutions or Solutions (eSF)**.
 - Click **Settings > Embedded Solutions**.
3. Click **Install**.
4. Click **Choose File** to browse to the folder where you extracted the FLS file.
5. Select the appropriate flash file, and then follow the instructions to complete the installation.

Note If you are unsure about which flash file to use, see the Readme.

When installation is complete, upload the **profile.ini** file. For more information on uploading the INI files, refer to the "Send profile definitions to a device" section of this document.

Open a firewall port

You must have a firewall port open for Message Agent to communicate information from Interact for Lexmark to ImageNow Server. If you have already opened a firewall port for the Message Agent web application server, skip this procedure.

1. Open the Windows utility that manages the firewall on the Message Agent server. For example, on Windows XP, on the Windows Taskbar, click **Start > Control Panel > Windows Firewall**, and then click the **Exceptions** tab.
2. Click **Add Port**.
3. In the **Add a Port** dialog box, in the **Name** box, type the name of the web application server that uses the port, which is probably ImageNow Message Agent.
4. In the **Port** box, type the port number for the Message Agent server computer. The default port is 6070 (or 6075 for secure communication).
5. Make sure **TCP** is selected and then click **OK**.
6. In the **Windows Firewall** dialog box, click **OK**.

Verify that Message Agent is running

Before you proceed, verify that Message Agent is running.

1. Make a note of the IP address of the Message Agent server computer. To do this:
 1. On the Windows Taskbar, click **Start > Run**, type **cmd** in the **Run** dialog box, and then click **OK**.
 2. In the command window, type **ipconfig** and press ENTER.
 3. Under **Ethernet adapter Local Area Connection**, copy the number in the **IP Address** row.
 4. Close the command window.
2. On a different computer, in a web browser, enter the IP address of the device:

```
http://<IP address>:<server port number>/Admin
```

In this URL, *<IP address>* is the address you copied earlier in this procedure and *<server port number>* is the port open for Message Agent, as described in the "Open a firewall port" section of this document.

3. Verify that the "Systinet Server for C/C++ Administration Console" page appears.

Establish a connection between Message Agent and the device

Complete the following steps to establish a connection between the Message Agent web application server and the Lexmark device. From this section of the Embedded Web Server, you can also set how long the screen can remain idle before the home screen appears and upload a profile configuration file from a previous version of the application.

Complete this procedure for each device using Interact for Lexmark.

1. Type the printer IP address into the address field of your Web browser and then press ENTER to access the Embedded Web Server for the device. The IP address of your printer may appear on the top left corner of your touch screen. The Embedded Web Server allows you to configure your device from a remote computer and check the status of the device.

Note If you do not know the IP address of the printer, print a network setup page and locate the IP address in the TCP/IP section. For information on printing a network setup page, refer to the “Print a network setup page” section of this document.

2. Do one of the following:
 1. Click **Settings > Device Solutions > Embedded Solutions** or **Solutions (eSF)**.
 2. Click **Settings > Embedded Solutions**.
3. On the **Solutions** tab, select **Interact for Lexmark**, and then click **Configure**.
4. In the **ImageNow Services IP** box, enter the IP address or fully qualified host name of the Message Agent server computer. For more information about this IP address and port, refer to the “Open a firewall port” section.
5. Type the ImageNow Services user name, password, and port in the fields provided.

Important

- The ImageNow Services user name is a user account reserved exclusively for authenticating the device to ImageNow Server. The ImageNow Services user name for each MFP must be unique so that ImageNow Server can establish a unique session with each device.

We recommend setting up a user account within ImageNow for this purpose only and then assigning the appropriate drawer, document type, and workflow privileges to the account.

Note

- The ImageNow Services Port is set to port 6070 by default. If the profile authentication is set to **None**, then the application uses the ImageNow Services user name and password to access ImageNow Server.
6. In the Screen Timeout field, set how long (in seconds) the screen can remain idle before the home screen appears.
 7. If an earlier version of the application has been previously installed, click **Choose File** to add a profile configuration file from that version of the application. This automatically creates the profiles defined in the configuration file.

Notes

- Only the profile file needs to be updated from the earlier version. Application files are no longer supported in Interact for Lexmark 3.x.x.
- Though Interact for Lexmark 3.x.x is compatible with earlier versions, the following profile settings are no longer applicable: profile.enabled, groups.name, user.groups.name, and application.names.

- Interact for Lexmark 3.x.x does not support UCF files exported from older versions of the application.
8. Click **Apply**.

Print a network setup page

If the printer is attached to a network, print a network setup page to verify the network connection. This page also provides important information that aids network printing configuration.

1. Make sure the printer is on and that Ready appears.
2. On the home screen, select **Menus**.
3. Select **Reports**.
4. Select **Network Setup Page**. The network setup page prints, and the printer returns to the home screen.
5. Check the first section on the network setup page and confirm that Status is "Connected."

If Status is "Not Connected," the LAN drop may not be active, the network cable may be malfunctioning, or, if you have a wireless printer model, the wireless network may not be configured properly. See your administrator for a solution and then print another network setup page.

For more information on network configuration for your device, refer to the *Networking Guide* on the *Software and Documentation* CD that came with your device and the *Embedded Web Server Administrator's Guide* on the Lexmark website at www.lexmark.com.

Configure ImageNow Server

After installing Interact for Lexmark, use the following procedures to install the Interact for Lexmark license and grant access privileges to a customized security group.

Install the Interact for Lexmark license

Prior to performing the following procedure, make sure you obtain an Interact for Lexmark license. The type of license you purchase depends on the number of devices that run Interact for Lexmark applications. To obtain the required license, contact your Perceptive Software representative.

1. Download the Interact for Lexmark license to the folder on your ImageNow Server computer where you have saved your other ImageNow license files.
2. In the **ImageNow** login screen, in the menu bar, click **License Manager**.
3. In the **License Management** dialog box, select **Upload Licenses** and then click **OK**.
4. Browse to the folder that contains the Interact for Lexmark license.
5. Double-click the license and then, in the **ImageNow License Manager** dialog box, click **Upload**.
6. In the **License Generation – Server Information** dialog box, enter the values required for user authentication and server information and then click **OK**.
7. When the **Successfully uploaded license** message appears, click **OK**.
8. Restart ImageNow Server.

Configure Interact for Lexmark

After you finish setting up ImageNow Server to receive documents from Interact for Lexmark, you need to edit the profile definitions to customize Interact for Lexmark.

You create profile definitions using the **profile.ini** file. A profile definition contains all the information your device needs to process a particular type of scanning job while requiring minimal input from the user.

The following sections describe the flexibility of Interact for Lexmark profile definitions and provide instructions configuring the INI file and uploading it to the device.

Overview

Interact for Lexmark provides two modes of interaction with the user: One Touch Scanning and Profile Selection. In One Touch Scanning mode, the user clicks one time to initiate scanning and automatic indexing. In this case, all the index key values are preconfigured. You can confirm that your device is configured for One Touch Scanning mode if the device begins scanning when you press an application button on the home screen.

In Profile Selection mode, the device user selects the index key values assigned to the documents the user is scanning. The number of user choices in this mode depends on how you set up the profile definition.

When you finish creating profile definitions, you must send them to the device for testing before making them available to users. For more information, refer to the “Test the application” section of this document.

Administrator-modifiable values for Interact for Lexmark fall into two categories:

- ImageNow profile settings, such as drawer or workflow queue
- Device scanner settings, such as page orientation or file type

Profile settings and device scanner settings appear in the device control panel in scrolling lists. You control how these fields behave by editing statements in the profile definition. The following procedures show you how to display fields, preset their values, and grant users the option of selecting or entering their own values for these fields.

To perform any of the customizing tasks in the following sections, perform the following steps:

1. In the folder where you extracted the ZIP file, make backup copies of the original **profile.ini** file. By making backup copies, you can restore default behavior to Interact for Lexmark without the need to reinstall.
2. Open the **profile.ini** file with a text editor. The **profile.ini** file is a sample profile definition containing all the possible settings. Make the changes you need, as described in the following sections, and be sure to save as a plain text file.
3. Save the file when you finish modifying it.
4. Send the profile definitions to a device.

Profiles

Each profile you define appears as a button on the device control panel. You can create as many profiles as you need by adding a new profile definition setting from the Embedded Web server and then uploading a **profile.ini** file for each profile definition. Note that the user works with one profile at a time. The illustration below shows how a profile appears on the home screen of the device. You can customize the text for the icon as well as the image.



Profile definitions

A profile definition contains all the information your device needs to process a particular type of scanning job. You can create as many profile definitions as you need. After you create the profiles, you send them to a device. When scanning a document, a user touches the appropriate scan profile to use for that job.

Each profile must be uploaded individually to the device using the Embedded Web Server.

Send profile definitions to a device

Perform the following steps when you want to send new or modified application and profile definitions to your device. For multiple devices, repeat this procedure for each device. This procedure sends the configuration files, which contain all profile definitions. However, only enabled profiles appear on the device control panel.

Tip When testing new profiles, send the configuration files to only one device and test them on that device. When you have verified that the profiles are working to your satisfaction, send the updated configuration files to the other devices in your facility.

1. Make sure that the device is on and that you have a live IP connection to the device. For more information, refer to the "Configure Interact for Lexmark" section of this document.
2. Open your web browser, type the device IP address into the address field, and then press ENTER.
Note If you do not know the IP address of the device, print a network setup page and locate the IP address in the TCIP/IP section. For information on printing a network setup page, refer to the "Print a network setup page" section of this document.
3. Do one of the following:
 - Click **Settings > Device Solutions > Solutions (eSF)**.
 - Click **Settings > Device Solutions > Embedded Solutions** or **Solutions (eSF)**.
 - Click **Settings > Embedded Solutions**.
4. On the **Solutions** tab, click **Interact for Lexmark** and then click **Configure**.
5. In the **Profile** section, click **Add**.
6. Configure the following settings:
 - **Icon Text**—Type the name of the profile that will appear on the printer home screen. This value should not exceed 20 characters.
 - **Icon**—Browse to an image file that represents the profile on the printer home screen. This field is optional. For more information on file sizes and types, refer to the mouse-over help.
 - **Icon When Pressed**—Browse to an image file that will be displayed while the icon is being pressed. This field is optional. For more information on file sizes and types, refer to the mouse-over help.
 - **Profile Configuration File**—Choose the configuration file that you want to associate with this profile. The configuration file contains definitions for the profile settings.
 - **Show Pre-Scan Prompt**—Select this option to prompt the user before scanning to place the document into the automatic document feeder (ADF) or on the scanner glass.
 - **Show Scan Confirmation**—Select this option to show a screen confirming the user's selections after scanning a document.
 - **Authentication Type**—Select **None** to use the ImageNow Services user name and password configured on the application configuration settings. Select Username/Password to prompt users to enter the ImageNow server credentials on the printer. If the application is configured to be accessed securely at the printer, then you can select **Use MFP authentication credentials**.

Notes

- **Use MFP authentication** credentials will work only if the user name and password used on the printer are the same as the ImageNow server credentials.
- In order for MFP authentication credentials to be used for user accounting, two additional custom properties must be added in ImageNow for the Document Type used by the user: `badge_id` and `user_name`.
- For more information on securing applications at the printer, refer to the *eSF Security Manager Administrator's Guide*.

7. Click **Apply**.

Note Keep the Embedded Web Server window open for setting the authentication type in the "Configure device authentication" section.

Turn on One Touch Scanning mode

Complete the following steps to enable or disable One Touch Scanning mode.

Note When you turn off One Touch Scanning mode, you enable Profile Selection mode.

1. In the **profile.ini** file, go to the application definition you want to change.
2. Complete one of the following options:
 - To enable One Touch Scanning Mode, set **onetouchscan.enabled** to **TRUE**.
 - To disable One Touch Scanning Mode, set **onetouchscan.enabled** to **FALSE**.
3. Save the **profile.ini** file and send the application definition to the device.

Document key settings in the profile definition

The procedures in this section define the document key values you assign to new documents so that they can be easily found in the ImageNow repository. Document keys include drawer, document type, folder, tab, Field3, Field4, and Field5, whose values can be created or reused by device users at the time a document is sent to ImageNow. Every document must have values assigned to drawer, document type, and at least one other document key. In addition, you can define any number of custom properties for a document type. Custom properties, therefore, are a supplementary set of keys for documents that require more extensive indexing.

The procedures in this section explain how to show or hide specific document keys, including custom properties, in the device control panel and how to grant or deny the ability to change these values to the user at the device.

Show or hide a field

The following procedure determines whether the device user will see a specific field. It does not give the user the ability to change the value in the field. To do that, refer to the “Allow a user to change a value” section of this document.

1. In the **profile.ini** file, go to the profile definition you want to change.
2. Find the appropriate **<object>.display** field in the profile definition, where *object* is a placeholder for the item you are showing or hiding, such as drawer, folder, or workflow.queue.
3. Change the values for the following settings:
 - To display the item in the control panel, set **<object>.display** to **TRUE**.
 - To hide the item in the control panel, set **<object>.display** to **FALSE**.

Note By enabling display of the drawer, document type, or workflow.queue objects, the control panel displays a fixed list of the values previously defined for these objects. For document keys such as folder or tab, or for a custom property, you can optionally prompt the user to enter a value.

Change the default value displayed for a field

A default value is a preset value for a field. You can either force the user to accept the value or let the user change it.

Important ImageNow Server requires that every document must be submitted with at least three document keys defined: drawer, document type, and any one of the following: tab, folder, Field3, Field4, or Field5. Therefore, when reviewing your profile definition, make sure that you have defined default

values for the document keys. (You can always allow the user to select an alternate value for one or more keys.)

1. In the **profile.ini** file, go to the profile definition you want to change.
2. Find the **<object>.default.value** setting that you want to change, where *object* is a placeholder for the item.
3. Set **<object>.default.value** to the default value you want, as in the example:

```
drawer.default.value=Vouchers
```

Notes

- Default values are case-sensitive.
- You can set fields to certain special values, as indicated in the following table.

Value	Description
__DeviceIPAddress__	Populates the field with the device IP address.
__DeviceName__	Populates the field with the device name.
__HostName__	Populates the field with the name of the host application, which is inserver6.
__UniqueID__	Populates the field with the unique ID for the document.

Create an exclusive list of values for a field

You can display a group of values for a user to choose from when assigning a value to an index key, similar to the combo box control used in data entry applications.

1. In the **profile.ini** file, go to the profile definition you want to change.
2. Find the **<object>.list.values** setting that you want to change, where *<object>* is a placeholder for the item.
3. Set **<object>.list.values** to a comma-separated list of strings, as in the example. Do not type a space after the comma.

```
field5.list.values=Southeast,Central,Northwest
```

You can select an option that appears in a column in the control panel.

Notes

- If you set a default value for an item that contains a list, the default value must be one of the items in that list.
- You cannot use lists of values for drawer or document type.

Allow a user to change a value

The following procedure explains how to make a field modifiable by the device user or to deny that privilege to the user for a specific field.

1. In the **profile.ini** file, go to the profile definition you want to change.
2. Find the **<object>.user.modifiable** field in the profile definition, where **<object>** is a placeholder for the item. Set **<object>.user.modifiable** to:

- **TRUE** to allow users to change the value for this field, as in the following example:

```
folder.user.modifiable=true
```

- **FALSE** to prevent users from changing the value for this field, as in the following example:

```
tab.user.modifiable=false
```

Allow a user to change custom property values

Custom properties are always associated with specific document types. You cannot reference them individually in the profile definition. The user sees only the custom properties associated with the selected document type.


- In the **profile.ini** file, go to the profile definition you want to change.
- To make all custom property fields mapped to the selected document type user-modifiable, set **custom.properties.user.modifiable** to **TRUE**.
- To prevent users from changing any custom property fields with this setting, set **custom.properties.user.modifiable** to **FALSE**.

Set up device statistics or workflow routing

The following sections describe procedures required for those applications of Interact for Lexmark that need to track device statistics or route new documents to a workflow queue.

Assign queue privileges

If you want Interact for Lexmark to add newly scanned documents to workflow queues automatically, use this procedure to grant access to all of the queues that receive documents.

1. On the **ImageNow** toolbar, click **Manage**.
2. In the left pane, click **Workflow**, select the workflow and then click **Modify**.
3. In the **ImageNow Workflow Designer** window, perform the following procedure:
 1. Double-click the queue.
 2. In the **Queue Properties** dialog box, in the left pane, click **Users**, and then click **Add**.
 3. In the **Select Users and Groups** dialog box, on the **Groups** tab, under **Available Groups**, click the user name associated with the ImageNow Services account, click **Add**, and then click **OK**. For more information about the ImageNow Services account, see the section on establishing a connection between the Message Agent and the device.
 4. In the **Queue Properties** dialog box, in the **Lexmark Interact Devices** row, click in the **Add** column until  appears.
 5. Click **OK**.

6. Repeat these substeps for each workflow and queue to which you want to grant access to device users.
4. On the **File** menu, select **Close**.

Documenting workflow settings

1. In the **profile.ini** file, go to the profile definition you want to change.
2. Find the **workflow.display** field in the profile definition, and change the values for the following settings:
 - To display the workflow button in the control panel, set **workflow.display** to **TRUE**.
 - To hide the workflow button in the control panel, set **workflow.display** to **FALSE**.
3. Find the **workflow.user.modifiable** field in the profile definition, and change the values for the following settings:
 - To allow users to change the value for this field, set **workflow.user.modifiable** to **TRUE**.
 - To prevent users from changing the value for this field, set **workflow.user.modifiable** to **FALSE**.

Enable SSL

1. Follow the Enable SSL directions in the Configure Message Agent topic of Message Agent Help.
2. In the `\inserver6\MessageAgent\server\conf\openssl-server.xml` file, perform the following change:

Change the following from

```
<htssl:context htssl:class="WASP_OpenSSLContextFactoryImpl"
xmlns:ssl="urn:OpenSSLContextFactory"
    ssl:certificateFile="openssl/server-cert.pem"
    ssl:privateKeyFile="openssl/server-key.pem"
    ssl:privateKeyPasswordFile="openssl/server-pass.txt"
    ssl:verify="yes"
    ssl:method="SSLv3"
  >
</htssl:context>
```

to

```
<htssl:context htssl:class="WASP_OpenSSLContextFactoryImpl"
xmlns:ssl="urn:OpenSSLContextFactory"
    ssl:certificateFile="openssl/server-cert.pem"
    ssl:privateKeyFile="openssl/server-key.pem"
    ssl:privateKeyPasswordFile="openssl/server-pass.txt"
    ssl:verify="no"
    ssl:method="SSLv23"
  >
</htssl:context>
```


Test the application

Before you proceed, make sure you sent the updated **profile.ini** file, which contain the profile definitions, to the device.

Prerequisite If the **profile.ini** file contains Native (non-English) characters, save the **profile.ini** file in UTF-8 encoding before uploading the file to the printer.

1. Go to the device, click the application button, and select the new profile.
2. Scan as many pages as necessary to use the options that you included in the application.
3. Return to your **ImageNow Client** computer and log in to **ImageNow Server** where the documents captured by Interact for Lexmark are deposited.
4. Inspect the documents in **ImageNow Explorer** and **ImageNow Viewer** to verify that they were scanned and indexed according to your requirements.
5. If necessary, update your profile definitions, resend the INI file, and repeat this procedure.

Uninstall, upgrade, or reinstall Interact for Lexmark

Complete the following steps to upgrade or reinstall Interact for Lexmark.

1. Uninstall Interact for Lexmark from the device.
2. Access the Embedded Web Server by opening your web browser, typing the device IP address into the address field, and then pressing ENTER.
3. Do one of the following:
 - Click **Settings > Device Solutions > Embedded Solutions or Solutions (eSF)**.
 - Click **Settings > Embedded Solutions**.
4. Click the **Interact for Lexmark** box.
5. Click the **Uninstall** button.
6. On the **Uninstall Solutions** page, click **Start Uninstall**.
7. Restart the Lexmark device.

Note It is important to restart the Lexmark device after uninstalling Interact for Lexmark, or you may receive the following error from the Embedded Web Server: "There is not enough space to install the applications in this flash file. Please make sure you have the correct file and try again."

8. If required, reinstall Interact for Lexmark. Refer to the "Install Interact for Lexmark on Windows" section of this document for instructions.

Operate Interact for Lexmark with the Remote Operator Panel

You can operate Interact for Lexmark remotely from any computer through the Embedded Web Server as long as the computer and the device are on the same network.

Notes

- Only one Remote Operator Panel user can control the device at a time.
- The Remove Operator Panel is not available on all devices.

Enable the Remote Operator Panel

1. To access the Embedded Web Server, open your web browser, type the device IP address into the address field, and then press ENTER. The IP address of your printer may appear on the top left corner of your touch screen.

Note If you do not know the IP address of the printer, print a network setup page and locate the IP address in the TCP/IP section. For information on printing a network setup page, refer to the “Print a network setup page” section.

2. Do one of the following:
 - Click **Settings > Device Solutions > Embedded Solutions** or **Solutions (eSF)**.
 - Click **Settings > Embedded Solutions**.
3. In the **Installed Solutions** column, click **Remote Operator Panel**.
4. Click the **Configure** tab.
5. Click the **Enabled** box and then click the **Apply** button.

Access the Remote Operator Panel

1. To access the Embedded Web Server, open your web browser, type the device IP address into the address field and then press ENTER. The IP address of your printer may appear on the top left corner of your touch screen.

Note If you do not know the IP address of the printer, print a network setup page and locate the IP address in the TCP/IP section. For information on printing a network setup page, refer to the “Print a network setup page” section.

2. Click **Applications**.
3. In the **Installed Solutions** list, click **Remote Operator Panel**.
4. Click the **Launch VNC Applet** button.

The device control panel opens in another web browser window. Refer to the *ImageNow Interact for Lexmark Getting Started Guide* for end-user instructions.

Troubleshoot Interact for Lexmark

Use the information provided in this section to troubleshoot Interact for Lexmark if a functional issue occurs. Troubleshooting information is divided into sections that describe a situation that could happen, along with the procedures to resolve the issue.

Note If you experience issues while using Interact for Lexmark, try restarting your Lexmark device. This often resolves issues you may encounter while using Interact for Lexmark.

The application icon does not appear on the Welcome screen

Sometimes after you have modified settings, the application icon no longer appears on the Welcome screen. To correct this, start and stop the application by following the screen prompts. If starting and stopping the application does not work, try restarting the device.

Scanned documents don't appear in ImageNow

Errors can occur when the web server and ImageNow Server are connected to the device. For some of these errors, Interact for Lexmark does not retry the scan job or notify the user of the scan failure. If this occurs, try the following solution steps:

- Review server log files for error information. The standard output log formats are: `inserver_i.log`, `inserverListener_yyyymmdd.log`, `inserverworker_yyyymmdd.log`, and `INServerMA_inserverMA_xxxxx_ma_yyyymmdd.log`.
- The `\inserver6\log\error_logs\xxxxmmd\inserver_XXXXXX_xxx_xx.xx.xx.xxxxxx.log` files are located in the `\inserver6\logs` folder. These log folders represent many types of errors.
- Message Agent interceptor logging does view tracking on the SOAP messages used to transport information. You can use the logging information for troubleshooting Message Agent operation calls. Refer to the “Configure Message Agent” help topic in the Message Agent online help on the Customer Portal or within the application directory of `\inserver\MessageAgent\help`.

If you are experiencing this issue and cannot identify the issue from the log file messages, contact your Perceptive Software Product Support representative. To assist in troubleshooting, you might be asked to read from or provide the log files.

Fix denied privileges and access

If an Interact for Lexmark user cannot access a drawer, folder or other item, verify that the correct access is set. For example, a user may experience one of the following access issues:

- If the user cannot access a drawer required by the application, an error message appears and prevents the user from submitting a document.
- If the user can access the drawer but the drawer field is not displayed on the control panel, ImageNow Interact for Lexmark submits a document with the default drawer value copied from the INI file.
- If the user does not have access to a workflow queue required by the application, the import to ImageNow Server succeeds, but the document is not added to the queue.

To grant drawer or queue access, refer to the Managing ImageNow > Management Console > Users, Groups and Security of ImageNow Administrator help. To display fields in the device control panel, edit the appropriate profile definition in the profile.ini file and then refer to the “Show or hide a field” and “Change the user’s access to a field” sections.

An application error has occurred

- Check the system log:
 1. Open a Web browser, and then type the printer IP address in the address field. The Embedded Web Server appears.
 2. From the navigation menu on the left, click **Settings** or **Configuration**.
 3. Click **Device Solutions > Solutions (eSF)**, or click **Embedded Solutions**.
 4. Click the **System tab > Log**.
 5. From the Filter menu, select an application status.
 6. From the application menu, select an application, and then click **Submit**.
- Adjust the scan settings. Select a lower scan resolution, or scan the document in black and white. You can also change to a smaller file format, such as PDF or JPG.
- If you are using ImageNow Server version 6.5.x or 6.6.x, make sure users with the same user name do not log into the Lexmark and ImageNow client at the same time. The ImageNow server can support only one session for every user name at any given time. If you are accessing the ImageNow server through a shared user name, then make sure that no one else is using the same login credentials. A shared user name may be used on multiple Lexmark devices at the same time.
- If you still cannot isolate the problem, contact your solutions provider for additional help.

Application cannot connect to ImageNow server

- Make sure the application settings match the settings for ImageNow Server. For more information on configuring Interact for Lexmark settings, refer to the “Establish a connection between Message Agent and the device” section of this document.
- Make sure all appropriate network cables are securely connected and the network settings of the printer are correctly configured. For information on networking the printer, refer to the printer *User's Guide* or the *Software and Documentation CD* that came with the printer.
- Check the system log:
 1. Open a Web browser, and then type the printer IP address in the address field. The Embedded Web Server appears.
 2. From the navigation menu on the left, click **Settings** or **Configuration**.
 3. Click **Device Solutions > Solutions (eSF)**, or click **Embedded Solutions**.
 4. Click the **System tab > Log**.
 5. From the Filter menu, select an application status.
 6. From the application menu, select an application, and then click **Submit**.
- Make sure that the ImageNow server is running and responding to client requests.

Application cannot authenticate user

- Check the application settings. Make sure the authentication options and ImageNow settings in the application configuration settings match the settings for the ImageNow server. For more information, refer to the “Configure Interact for Lexmark” section of this document.

- Make sure printer authentication is configured. If the application is configured to use printer authentication credentials, then the printer authentication settings must be configured from the Embedded Web Server. For more information on configuring the printer authentication settings, see the *Embedded Web Server Administrator's Guide* available at www.lexmark.com.
- Make sure you use the correct username and password. If a profile authentication is set to None, then the application will use ImageNow credentials to authenticate users. Make sure to type the correct user name and password combination from the application configuration settings. If a profile authentication is set to Username/Password, then users will be prompted enter their credentials.
- If you still cannot isolate the problem, then contact your solutions provider representative for additional help.

Application cannot associate scanned documents to workflow queues

Change the document keys. Scanned documents with the same set of document keys cannot be uploaded to the same workflow queue more than once. Make sure you define a distinct set of document keys for every document you want to assign to the same queue.

Appendix A: Embedded Web Server

You can use the Embedded Web Server to configure several settings for your Interact for Lexmark, such as indicating the URL of your ImageNow Message Agent Server. You can also export Interact for Lexmark settings to a UCF file for reuse, or import a UCF file.

For more information on using the Embedded Web Server, refer to the *Embedded Web Server Administrator's Guide* on the Lexmark website at www.lexmark.com.

Note To complete the steps in the sections below, you need to know the IP address of the printer. The IP address of your printer may appear on the top left corner of your touch screen. If you do not know the printer IP address, then print a network setup page and locate the IP address in the TCP/IP section. For information on printing a network setup page, refer to the “Print a network setup page” section.

Export a configuration file

To export device settings to a UCF file for reuse:

1. Type the printer IP address in the address field of your web browser and press ENTER.
2. Do one of the following:
 - Click **Settings > Device Solutions > Embedded Solutions** or **Solutions (eSF)**.
 - Click **Settings > Embedded Solutions**.
3. On the Solutions tab, select **Interact for Lexmark**, and then click **Configure**.
4. Scroll to the bottom of the settings window and click **Export**.
5. Follow the prompts from your web browser to save the file.

Import a configuration file

To import Interact for Lexmark settings from UCF file. Note that no password is imported or exported so you need to finish the configuration.

1. Type the printer IP address in the address field of your web browser and press ENTER.
2. Do one of the following:
 - Click **Settings > Device Solutions > Embedded Solutions** or **Solutions (eSF)**.
 - Click **Settings > Embedded Solutions**.
3. On the Solutions tab, select **Interact for Lexmark**, and then click **Configure**.
4. Scroll to the bottom of the settings window, and then click **Import > Browse**.
5. In the **File Upload** window, select the UCF file you want to upload and the click **Open**.
6. Click **Start**. When the system finishes importing the file, the Configure window appears showing the settings you imported.
7. Click **Apply** to save these settings.

Appendix B: INI Configuration Tables

This appendix describes the options available for setting up Interact for Lexmark. Note that not all scan settings are available on all devices.

profile.ini settings

The following table provides profile definitions and sample data for the settings in the profile.ini configuration file. This table displays the INI settings under separate bracketed group headings for each profile definition, such as [Lexmark], in the order the groups appear in the INI file. Each subsequent profile requires its own unique bracketed group heading and as many of the settings as you want to enable for that application. Each setting offers two or more options, defined in the following table along with a description of each setting and its options. Use this table as a guide when you customize the file.

Setting	Options	Description
onetouchscan.enabled	TRUE FALSE	Turns One Touch Scanning mode on or off in the application. The default is FALSE.
drawer.display	TRUE FALSE	Displays or hides the Drawer button on the Document Keys screens. The default is TRUE.
drawer.user.modifiable	TRUE FALSE	Allows the user to select a different drawer. The default is TRUE.
drawer.default.value	A drawer name	Presets the selected drawer. The default is Default.
drawer.display.name	Any characters	Allows you to set a custom label for the Drawer document key on the on the Document Keys screens. The default is Drawer.
doctype.user.modifiable	TRUE FALSE	Allows the user to select a different document type. The default is TRUE.
doctype.display	TRUE FALSE	Displays or hides the Document Type button on the Document Keys screens. The default is TRUE.

Setting	Options	Description
doctype.default.value	Any characters (but must be a configured document type in the ImageNow Server).	Presets the selected document type. The default is Default.
doctype.display.name	Any characters	Allows you to set a custom label for the Document Type document key on the Document Keys screens. The default is Document Type.
workflow.display	TRUE FALSE	Displays or hides the workflow queue button on the Workflow screen. The default is TRUE.
workflow.user.modifiable	TRUE FALSE	Allows the user to select a different workflow queue. The default is TRUE.
workflow.process.default.value	Enter the name of an existing process	Presets the selected workflow process. For more information on the existing workflow process names, contact the ImageNow server administrator.
workflow.queue.default.value	Enter the name of an existing queue in ImageNow.	The default is empty. For more information on the existing workflow queue names, contact the ImageNow server administrator.
folder.display	TRUE FALSE	Displays or hides the Folder button on the Document Keys screen. The default is TRUE.
folder.user.modifiable	TRUE FALSE	Allows the user to enter a folder. The default is TRUE.
folder.list.values	A comma-delimited list of strings	Use to specify the folders that appear to the user. For example: freshman, sophomore, junior, senior
folder.default.value	One item from folder.list.values	Presets the selected folder.
folder.display.name	Any string	The name displayed for the folder. The default is Folder.

Setting	Options	Description
tab.display	TRUE FALSE	Displays or hides the Tab button on the Document Keys screen. The default is TRUE.
tab.user.modifiable	TRUE FALSE	Allows the user to enter a value for tab. The default is TRUE
tab.list.values	A comma-delimited list of strings	Use to specify the tabs that appear to the user. For example: active,inactive,injured
tab.default.value	One item from tab.list.values	Presets the selected tab value.
tab.display.name	Any string	The name displayed for the tab. The default is Tab.
field3.display	TRUE FALSE	Displays or hides Field3 on the Document Keys screen. The default is TRUE.
field3.user.modifiable	TRUE FALSE	Allows the user to enter a value for Field3. The default is TRUE
field3.list.values	A comma-delimited list of strings	Displays a list of values from which the user can select for Field3.
field3.default.value	One item from field3.list.values	Presets the selected Field3 value.
field3.display.name	Any string	The name displayed for Field3. The default is Field 3.
field4.display	TRUE FALSE	Displays or hides the Field4 element on the Document Keys screen. The default is TRUE.
field4.user.modifiable	TRUE FALSE	Allows the user to enter a value for Field4. The default is TRUE
field4.list.values	A comma-delimited list of strings	Use to specify values the user can select for Field 4.

Setting	Options	Description
field4.default.value	One item from field4.list.values	Presets the selected Field4 value.
field4.display.name	Any string	The name displayed for Field4. The default is Field 4.
field5.display	TRUE FALSE	Displays or hides the Field5 element on the Document Keys screen. The default is TRUE.
field5.user.modifiable	TRUE FALSE	Allows the user to enter a value for Field5. The default is TRUE
field5.list.values	A comma-delimited list of strings	Use to display a list of values from which the user can select for Field5.
field5.default.value	One item from field5.list.values	Presets the selected Field5 value.
field5.display.name	Any string	The name displayed for Field5. The default is Field 5.
custom.properties.user.modifiable	TRUE FALSE	Displays all custom properties in the selected document type and allows the user to change the values. The default is TRUE.
doctypelist.value	A comma-delimited list of strings	Displays only document types within this document type list. The default is empty, meaning all document types are displayed.
scan.settings.user.modifiable	TRUE FALSE	Specifies if the user can select the scan settings for the pages they want to scan. When this value is FALSE, the individual scan settings that follow are ignored and the Scan Settings page is not displayed. When this value is TRUE, the user can modify the scan settings on the Scan Settings page, which take effect when the paper is scanned. The default is TRUE.

Setting	Options	Description
scan.setting.page.size	MIXED AUTO_SIZE_SENSE LETTER LEGAL EXECUTIVE FOLIO OFICIO A3 A4 A5 JB4 JB5 PHOTO_3X5 PHOTO_4X6 BUSINESS_CARD BOOK_ORIGINAL STATEMENT TABLOID	Specifies the size of the paper to scan. The default is LETTER, which means the scanner automatically senses the size of each scan page. Note Not all scan sizes are available on all models of devices.
scan.setting.page.size.modifiable	TRUE FALSE	Specifies if the user can select the paper size to scan using the scan.setting.page.size setting. The default is TRUE.
scan.setting.duplex.mode	ONE_SIDED TWO_SIDED SECOND_SIDE_ROTATION	Makes the scanner scan only one side of the originals or both sides of the originals. The TWO-SIDED option means the print is facing the same direction on both the front and the backsides. The SECOND_SIDE_ROTATION option means the print is facing the opposite direction on the backside of the page. The default is ONE_SIDED.
scan.setting.duplex.mode.modifiable	TRUE FALSE	Allows the user to switch between single-sided and double-sided scanning. The default is TRUE, which means the user can switch DUPLEX modes.

Setting	Options	Description
scan.setting.document.image	MIXED PHOTO TEXT	Indicates the type of documents being scanned. The default is MIXED.
scan.setting.document.image.modifiable	TRUE FALSE	Allows the user to choose the document image type in the scan.setting.document.image setting. The default is TRUE.
scan.setting.page.orientation	PORTRAIT LANDSCAPE	Indicates the orientation of the paper that the device is scanning. The default is PORTRAIT.
scan.setting.page.orientation.modifiable	TRUE FALSE	Allows the user to choose the orientation in the scan.setting.page.orientation setting when this setting is equal to TRUE. The default is TRUE.
scan.setting.color.mode	FULL_COLOR GRAYSCALE BLACK_AND_WHITE	Indicates the mode in which the device is scanning. If the device does not scan in color, the setting defaults to GRAYSCALE. The default is BLACK_AND_WHITE.
scan.setting.color.mode.modifiable	TRUE FALSE	Allows the user to choose the color mode in the scan.setting.color.mode setting when this setting is equal to TRUE. The default is TRUE.
scan.setting.resolution	72, 150, 200, 300, 400, 600	Indicates the scanner resolution. If the resolution setting is too high for the scanner, the scanner automatically uses the highest possible resolution. The maximum resolution for the XPS and PDF file types is 300 DPI. If a value greater than 300 DPI is specified, the resolution defaults to 300 DPI. Additionally, you cannot scan in color at greater than 300 DPI. The default is 300.
scan.setting.resolution.modifiable	TRUE FALSE	Allows the user to choose the scanner resolution in the scan.setting.resolution setting when this value is equal to TRUE. The default is TRUE.

Setting	Options	Description
scan.setting.file.type	TIFF, PDF, MTIFF, JPEG, XPS	<p>Designates the output file type.</p> <p>Using TIFF in conjunction with color for Color Mode (Full Color or Grayscale) could lead to memory limitations depending upon the size of the page and the content of the scan.</p> <p>Note that the MTIFF option stands for multi-page TIFF file. XPS is not available on all devices. The black and white color mode is not available for the JPEG file type.</p> <p>The default is TIFF.</p>
scan.setting.file.type.modifiable	TRUE FALSE	<p>Allows the user to choose the output file type in the scan.setting.file.type setting when the setting is equal to TRUE.</p> <p>The default is TRUE.</p>
scan.setting.background.removal	-4 through +4	<p>These advanced scan settings are not user modifiable. Specifies the amount of background removal in the scanned image.</p> <p>Higher values progressively clip more light shades to white.</p> <p>The default is 0, which equates to neutral.</p>
scan.setting.color.dropout	NONE RED GREEN BLUE	<p>These advanced scan settings are not user modifiable. Specifies which, if any, color is converted to white ("dropped out") in the scanned image.</p> <p>This setting only has an effect if the color mode of the scan.setting.color.mode setting is equal to BLACK_AND_WHITE or GRAYSCALE.</p> <p>The default is NONE, meaning no colors are dropped out of the scanned image.</p> <p>This setting is not available on all devices.</p> <p>Each color has an associated threshold setting (for example, scan.setting.color.dropout.red.threshold) that determines the color intensity required for dropout. (Refer to the next row for this setting.)</p>

Setting	Options	Description
scan.setting.color.dropout.<n>.threshold	0 to 255	<p>These advanced scan settings are not user modifiable. The default value is 128. This means that colors that include a color value above 128 appear lighter (the <n> component is converted to white). Colors that include an <n> color value below 128 appear darker. <n> = RED, GREEN, or BLUE.</p> <p>In general, increasing the value of this setting converts fewer shades to white and more shades to black. Decreasing the value of this setting converts more shades to white and fewer shades to black.</p> <p>Each threshold setting is used only if its associated color has been selected as the value for the scan.setting.color.dropout setting.</p> <p>The default value is 128.</p> <p>This setting is not available on all devices.</p>
scan.setting.contrast	0 to 5	<p>These advanced scan settings are not user modifiable. Specifies the contrast level of the scan. The range of values for this setting are 0 to 5, with 0 representing the least scan contrast, and 5 representing the most. Additionally, you can use BEST_FOR_CONTENT to allow the device to automatically select an optimal contrast value based on the scan content. The default is BEST_FOR_CONTENT, which means that the device automatically selects the scan contrast level.</p>
scan.setting.jpeg.quality	5 to 90 BEST_FOR_CONTENT	<p>These advanced scan settings are not user modifiable. Specifies the image quality to retain by the JPEG compression algorithm. The values for this setting range from 5 to 90, in order of increasing quality and scan image size. Additionally, you can use the value BEST_FOR_CONTENT to allow the device to automatically select an optimal quality value based on the scan content.</p> <p>The default is BEST_FOR_CONTENT, which means that the device automatically selects the JPEG compression quality.</p>
scan.setting.mirror.image	On Off	<p>These advanced scan settings are not user modifiable. Specifies whether to save the scanned image as a mirror image of the original scan page or pages. This setting is not available on all devices.</p> <p>The default is Off, which means that the scanned image is not saved as a mirror image of the original scan.</p>
scan.setting.negative.image	On Off	<p>These advanced scan settings are not user modifiable. Specifies whether to save the scanned image as a negative (for example, color inverted) image of the original scan page or pages. This setting is not available on all devices.</p> <p>The default is Off, which means that the scanned image is not saved as a negative image of the original scan.</p>

Setting	Options	Description
scan.setting.shadow.detail	-4 to +4	<p>These advanced scan settings are not user modifiable. Specifies how much detail appears in shadows or shaded image content. The range of values for this setting are -4 to +4, where -4 is the least shadow detail, and +4 is the most shadow detail.</p> <p>The default is 0, meaning that moderate shadow detail is recorded.</p>
scan.setting.edge.to.edge	On Off	<p>These advanced scan settings are not user modifiable. During normal scanning, the scanner places a small border around the edge of the document. Set the value of this setting to On to eliminate the border and scan from one edge of the document to the other.</p> <p>When this setting is enabled, it overrides the scan.setting.edge.erase.<n> setting.</p> <p>The default is Off.</p>
scan.setting.sharpness	1 2 3 4 5	<p>These advanced scan settings are not user modifiable. Specifies the sharpness of the scanned image. The range of values for this setting are 1 to 5, where 1 is the least sharp and 5 is the most sharp.</p> <p>Values less than 3 soften the image, and values greater than 3 sharpen the image.</p> <p>The default is 3, meaning that the scanned image is not smoothed or sharpened. The image is not changed.</p>
scan.setting.custom.job	On Off	<p>These advanced scan settings are not user modifiable. Specifies whether multiple sets of scan pages can be combined into a single scan job. In between each set of scan pages, the user is prompted if the job is complete.</p> <p>The default is Off, meaning each scan job will consist only of a single set of scan pages.</p>
scan.setting.edge.erase.<n>	top bottom right left	<p>These advanced scan settings are not user modifiable. Specifies the width in millimeters (mm) of the image to erase at the <n> edge, where <n> can be top, bottom, right, or left.</p> <p>When this setting is enabled, it overrides the scan.setting.edge.erase.<n> setting.</p> <p>The default is 0, which means that no image data should be erased at the <n> edge.</p>

Setting	Options	Description
scan.setting.darkness	An integer from 1 to 9	<p>These advanced scan settings are not user modifiable. Specifies the darkness level of the scan. For this setting, a value of 1 is the lightest and 9 is the darkest.</p> <p>The default is 5, which means that the darkness level is moderate.</p>

Index

allow the Lexmark device user to	
change a value	15
change custom properties	15
application	
how to test.....	17
sending to a device	11
application definition	
overview	10
Application Selection mode	10
field	
change default value displayed.....	13
create list of values for	14
show or hide	13
firewall port, opening	7
ImageNow Server setup	9
ini settings.....	23
INLexmarkProfile.ini file	23
Installation overview	5
Lexmark device	
sending application definitions to	11
license installation.....	9
One Touch Scanning mode.....	10
enable.....	13
queue privileges.....	15
Set up ImageNow Server.....	9
testing an application	17
Tomcat.....	6
troubleshooting.....	19
web server, testing the connection	7